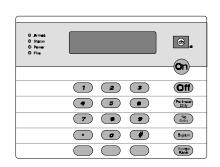
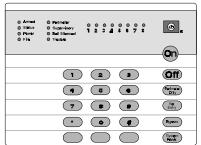
Reference Guide for the **DS7060 Control/Communicator**







Keypad Quick Reference Guide

Turning On (arming) your System

Normal Arming PIN + [On]

PIN + [No Entry] [Perimeter Only] Perimeter Arming, no entry delay

Perimeter Arming, with entry delay PIN + [Perimeter Only] Maximum Security Arming PIN + [No Entry] [On]

PIN + Arming Sequence + [Bypass] Force Arming

Zone Bypass PIN + [Bypass] followed by the Zone number

Custom Arm PIN + [#] + [4] Quick Arm [#] + [On]

Turning Off (disarming) your System

PIN + [Off]

Commands for other System Features

Chime Mode PIN + [#][7]PIN + [#] [8] [1] Zone Test Read Alarm History PIN + [#] [8] [9] PIN + [System Reset] **Battery Test** Communicator Test PIN + [#] [8] [2] Fire Reset PIN + [System Reset]

Fire Trouble PIN + [Off] to silence, PIN + [System Reset] to clear

PIN + [#] [8] [3] Remote Program Dial Out Remote Program Answer PIN + [#] [8] [6] Local Battery/Sounder Test PIN + [#] [8] [5] **Error Display** PIN + [#] [8] [7] Error Display Reset PIN + [System Reset] PIN + [Bypass] [*] to clear Clear Zone Bypass

Guest Code Enable PIN + [#] [8] [4]

NOTE: Examples are shown in Commercial Mode, but are valid for any mode.

Detection Systems PTY Ltd. Unit 21, 45 Gilby Road Mount Waverley 3149, Australia 61 3 9558 8088 Fax: 61 3 9588 8089

Detection Systems PTY Ltd. Unit 2, The Riverside Centre 148 James Ruse Drive Parramatta, NSW 2150, Australia 61 2 891 4944 Fax: 61 2 891 5844

1.0 SYSTEM OVERVIEW

The DS7060 Control/Communicator is a fully integrated hard-wire security and residential fire alarm system. It can support up to 6 input zones and 15 individual users. Up to 4 keypads may be used to provide user interface with the system, as well as programming access for the installer.

2.0 SPECIFICATIONS

2.1 Enclosure Housing

The enclosure is manufactured from 22 Ga. (0.65 mm), cold-rolled steel, and measures 9.25" Wide, by 10.25" High, by 3" Deep (23.5 cm Wide, by 26 cm High, by 7.6 cm Deep). The door has a knockout for a standard DS lock (optional). The enclosure has a slot in the back and also has an optional tamper switch mounting bracket with a plunger switch.

2.2 Temperature

Operating temp: +32° to +120°F (0° to +49°C)

• Storage temp: -20° to +150°F (-28° to +66°C)

2.3 Power

 Input Power: 16.5 VAC (U.S.) 16 VAC (Aust), 20 VA, 50 or 60 Hz

Auxiliary Regulated Power: 12-12.5 VDC, 0.8 A

Auxiliary Power Voltage Range: 10 to 13.8 VDC

Optional Standby battery (P334): 12 V, 7.0 AH

- Optional Standby Battory (1 00 1). 12 v, 7.0 7th

Control Panel Current Draw:

• DS7443 Keypad Current Draw: 45 mA, Standby

45 mA, Alarm

65 mA

• DS7445 Keypad Current Draw: 75 mA, Standby

75 mA, Alarm

• DS7447 Keypad Current Draw: 100 mA, Standby

100mA, Alarm

• Fuse 1 and 2: 1 A, 250 V

2.4 Outputs

- Programmable Output 1*: Solid state, switch to ground (500 mA max.).
- Programmable Output 2*: Solid state, switch to ground (500 mA max.).
- Programmable Output 3*: Form "C" relay contacts available. Typical: Normally Open contacts that switch to 12 V @ 800 mA.
- * = Current draw should be subtracted from either maximum auxiliary or maximum alarm current draw.

Refer to Section 6.8 for detailed Output operation.

2.5 Zones

- 6 zones (9 if Zone Doubling is used)
- Zone Response Time: All six zones can be programmed to respond at either 300 ±100 ms or a programmable time (common to all zones) that can be configured to be between 10 ms and 2.5 seconds. Zones are ignored for 15 seconds after power up, and for two seconds after a system reset.

Refer to Sections 6.2 - 6.7 for detailed zone operation.

2.6 Keypads

Total number of keypads:
 4 Keypads

• Max. wire length total in system: 1000 ft. (305 m)

• Wire type: 22 AWG (0.8 mm)

NOTE: Keypads may be up to 1000 ft. (305 m) from the panel when #22 (0.8 mm) wire is used and only one keypad is connected to a particular wire run.

2.7 Communicator

Will report to two phone numbers with full single, double, and backup reporting. Communicated in 3/1, 3/1E, 3/1 with Parity, 3/1E with Parity, 4/1, 4/2, High Speed 4/9, Pager, Contact ID, and Personal Dialing formats.

Refer to Sections 6.14 - 6.33 for communicator operation.

The ringer equivalence is 0.1 B.

2.8 Users

The system allows up to 15 individual users. Each user will have his own PIN number (the 4 digit code entered at the keypads).

2.9 Lightning Protection

MOVs and/or spark gaps provide protection from lightning surges and static discharges.

2.10 Burglar/Fire Zone Inputs

Number of Circuits:
 6 Circuits on board

• End-of-Line Resistor: 2.21k ohms

NOTE: 4 wire type smoke detectors only.

2.11 Line Seizure Notice

This control panel incorporates a line seizure feature which will disable internal telephone lines when the control panel is sending alarm or supervision reports to the central station.

3.0 ENCLOSURE INSTALLATION

The DS7060 control/communicator and the enclosure are shipped together. The control, however, still needs to be installed into the enclosure. Hardware for mounting the enclosure to a wall, and the control to the enclosure is located in its own hardware pack.

3.1 Install the Enclosure

NOTE: This panel is intended for mounting in a restricted access area and should be wall

mounted.

CAUTION: The control panel should only be

installed by authorized service

personnel.

- Use the enclosure as a template and mark the mounting holes on the mounting surface.
- Pre-start the mounting screws for these holes. Mount the enclosure.
- Knock out the desired wire entrances on the enclosure.

3.2 Install the Control/Communicator

CAUTION: The control is static sensitive. Make sure

you touch earth ground before handling the control. This will discharge any static

electricity in your body.

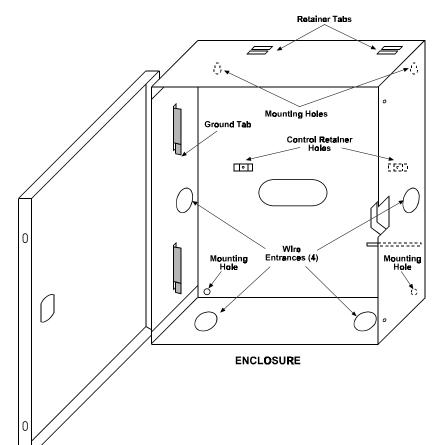
EXAMPLE: Run the ground wire to the enclosure before handling the control. Then,

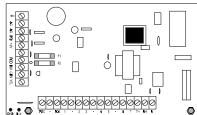
holding the ground wire (or using a ground strap), install the control.

 Insert the two support posts into the control retainer holes as shown below in the Support Post Assembly diagram.

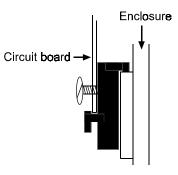
- Slide the top of the control PCB into the two retainer tabs.
- Once in the retainer tabs, the control will rest on the two support posts.
- Secure the bottom of the enclosure by screwing the bottom two holes through the support posts and through to the control retainer holes.

CAUTION: Once the control is installed, be sure to connect its ground wire to the top hinge of the enclosure.





CONTROL/COMMUNICATOR



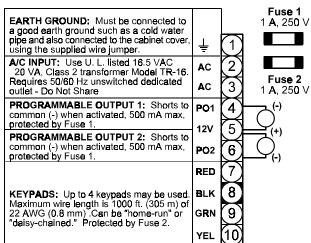
SUPPORT POST ASSEMBLY

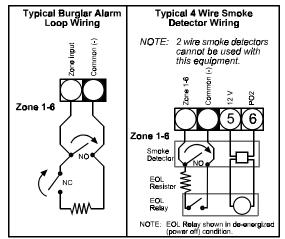
4.0 CONTROL TERMINAL WIRING

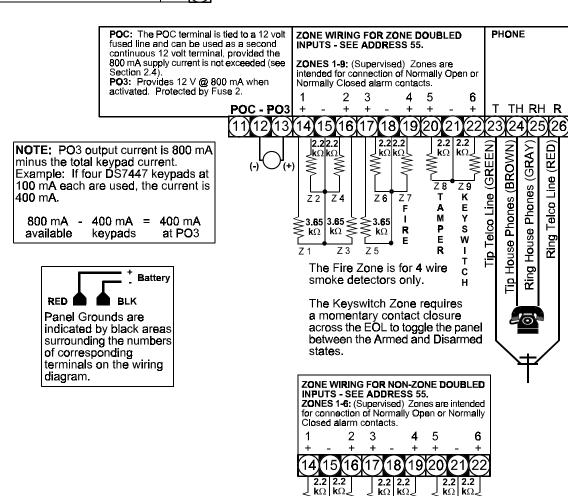
WARNING: Before servicing this equipment, remove all power including the transformer and battery. Also remove the phone line connection. A complete functional test is required after any programming.

CAUTION: Incorrect connections may result in damage to the unit.

NOTE: Shared cable is not allowed for keypad, telephone, or siren wiring.







5.0 Operating Guide

5.1 Understanding the DS7443, DS7445, and DS7447 Keypads

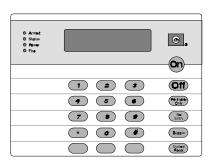
- The DS7443 is a 6 zone LED keypad; its LEDs represent the zones of the system.
- The DS7445 is an 8 zone LED keypad; its LEDs represent the zones of the system (LEDs for zones 7 and 8 are not used).
- The DS7447 is an alpha-numeric LCD keypad.

All three keypads display information on various control panel functions. A built-in sounder is used to annunciate keystroke entries and as an interior warning device.

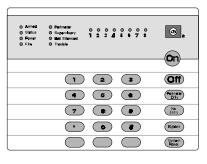
Volume Control (DS7445 and DS7447 only): The keypad sounder volume can be adjusted using the [1] and [4] keys along with the [*] key. Hold the [*] key while pressing the [1] key to increase the volume or the [4] key to decrease the volume. The volume adjustment does not affect the volume during an alarm.

Backlight Control (DS7447 only): The display backlight intensity can be adjusted using the [3] and [6] keys along with the [*] key. Hold the [*] while pressing the [3] key to increase brightness or the [6] key to decrease brightness.

NOTE: After the backlight and volume are adjusted, you must arm then disarm the system once to store this information in the control panel. If power is disconnected before the panel is armed, the backlight and volume levels return to the default settings.







DS7447 KEYPAD

DS7443 KEYPAD

DS7445 KEYPAD

This chart will help you understand what each Light/LED represents.

LIGHT	OFF	FLASHING	ON	
Armed (red)	The control panel is disarmed.	An exit delay is in progress or an alarm has occurred.	The control panel is armed and no alarms have occurred.	
Status (green)	One or more zones are not ready to arm.	One or more zones are bypassed.	All zones are ready to arm.	
Power (green)	The control panel has lost power. No AC for battery.	Control panel problems. Refer to Error displays.	Normal operation.	
Fire (red)	There are no fire alarms.	A fire zone is in alarm.	A fire trouble condition exists.	
Perimeter* (yellow)	The perimeter is not armed.	This light will not flash.	The perimeter is armed.	
Supervisory* (yellow)	This light will not be sued by the DS7060.	Not used.	Not used.	
Bell Silenced* (yellow)	The bells do not need to be or have not been silenced.	This light will not flash.	The bells have been silenced. To clear, enter the Fire Reset command.	
Trouble* (yellow)	3		A trouble condition exists.	
Zone LEDs** (red)			A zone (1-6) is not ready to arm or if a fire zone, a trouble condition exists.	

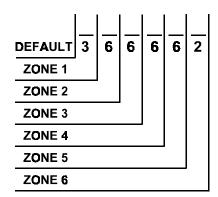
^{* =} This light is present on the DS7445 only.

^{** =} This light is present on the DS7443 and DS7445.

6.0 Programming the DS7060

6.1 Address 01 - Zone Programming

A zone is an input to the DS7060 Control Communicator. There are 6 hard-wired zones on the main circuit board.



- 0 = Disabled
- 1 = Perimeter Instant
- 2 = 24 Hour
- 3 = Perimeter Delayed
- 4 = Interior Follower
- 5 = Interior Home/Away
- 6 = Interior Instant
- 7 = Perimeter Homeguard
- 8 = Perimeter Follower Homeguard
- 9 = Silence Audible
- A = Keyswitch Toggle
- B = Keyswitch On/Off
 C = 24 Hour Fire w/Verify
- C = 24 F D = Fire
- E = Interior Delayed
- F = Day Monitor

If Zone Doubling is used (See Address 55) Zone 9 is pre-programmed as a Keyswitch Toggle zone. You may not assign keyswitches to any other zones. Keyswitch On/Off cannot be used in Zone Doubled systems.

- **Disabled**: These zones are not monitored, and will not generate alarm or trouble conditions.
- Perimeter Instant: These zones arm and disarm with the panel, and never have entry or exit delays.
 Violation of this type of zone will cause an intrusion alarm.
- 24-Hour Auxiliary: This zone type will cause an auxiliary alarm. It is always active. An alarm on a 24-hour zone (fire or aux.) will be silenced by entering a disarm code whether the control is armed or not. If the 24-hour zone restores and alarms again the alarm will sound again. 24-hour zones may generate trouble conditions during armed or disarmed periods. All 24-hour zones that have alarmed and are not restored will show as "Not Ready." They will prevent arming unless the panel is force armed. 24-hour zones that have been bypassed manually will remain so until manually unbypassed, even if the control is armed and disarmed. Bypasses of these zones will be displayed on the keypad.

Perimeter Delayed: These zones have entry or exit delays unless the panel is armed in the "No Entry" mode. In the "No Entry" mode, the exit delay is in effect immediately after entering the "No Entry" mode, but is disabled upon expiration of the exit delay.

A delayed zone is ignored during the programmed times immediately following arming during the exit delay. If the zone is faulted while the control is armed and not in exit delay then an entry delay cycle will be started, and a continuous entry tone will be sounded at the keypads. If the control is not disarmed by the end of the entry delay, an alarm will result. There are no keypad tones during the exit delay unless the feature "Keypad Audible During Exit Delay" is selected. Refer to Section 6.9, Address 09. If an entry delay is running and another entry delay zone is faulted, the entry delay timer is unaffected and will continue timing from the first entry. The entry delay time and exit delay time can be set independently.

If a delayed zone remains faulted at the end of an exit delay, the panel will optionally signal an exit error condition. The entry delay will be begin as above, and the alarm output will activate with the pattern selected for that zone. If the control is not disarmed by the end of the entry delay, an alarm will result, and an exit error report will be sent to the central station (following the alarm report if programmed). The alarm output will deactivate. If the control is disarmed during the delay period started by the exit error condition, no reports will be sent to the central station and any outputs on during the exit error will deactivate. The exit error report does not follow the dialer delay option.

- Interior Follower: This zone is not active when the panel is disarmed, or is armed in the perimeter only mode. When the zone is active, if a delayed zone is violated first, this zone is also delayed. If an instant zone or this zone type is violated first, this zone is not delayed. This zone is not active during the exit delay.
- Interior Home/Away: This zone becomes interior instant if the system is armed and an entry/exit delay zone is violated during the exit delay time. If the system is armed and an entry/exit zone is not violated, these zones will be bypassed. These zones are bypassed if armed perimeter only.
- Interior Instant: These zones arm and disarm with the panel. They are not active if the panel is armed in the "perimeter only" mode. They never have entry or exit delays. Violation of this type of zone will cause an intrusion alarm.
- Perimeter Homeguard: This zone type is active when the panel is armed. When the panel is armed perimeter only, this is a delayed zone. When armed full, this is an instant zone.
- Perimeter Follower Homeguard: These zones are always delayed when the panel is armed in the perimeter only mode. When the panel is fully

armed, these zones are delayed if a delayed zone is violated first, or instant if this zone or an instant zone is violated first.

- Silence Audible: A zone configured as Silence Audible will, when activated, cause the panel to shut off output PO3 and keypad sounders. When this zone restores, the sounders will reactivate (if the timeout has not expired). It is used to facilitate voice communication for listen-in modules.
- Keyswitch Toggle: Each time this zone is closed, it will toggle the armed state of the panel. It has a 300 ms response time. No alarms or trouble conditions are generated by a zone of this type. Optionally, to support this feature, the panel will generate a single siren beep for arm actions and a double beep for disarm actions.

Note 1: If "Auto Bypass" is enabled (Address 10), Keyswitch Toggle will force arm a "Not Ready" zone.

Note 2: Zone 9 is pre-programmed as a Keyswitch Toggle zone.

• Keyswitch On/Off: Not available when zone doubling is used. When this zone is closed, it will arm the panel. When it is shunted by an EOL (supervised), the panel will be disarmed. No alarms or trouble conditions will be generated by a zone of this type. Opening the zone will not affect the arming state of the control. When this option is selected, keypads can not be used to arm or disarm the system unless the keyswitch zone is manually bypassed, prior to arming the system, from the keypad. If the keyswitch zone is bypassed, any keypad can perform all arming and disarming functions.

Note: If "Auto Bypass" is enabled (Address 10), Keyswitch On/Off will force arm a "Not Ready" zone.

• 24-Hour Fire with Verification: If a fire zone alarms and it is programmed for verification, the control will interrupt the programmable output(s) set as a switched power return for 10 seconds. During the 10 second power interruption, and for 15 seconds after power restoral, it will ignore all zone status on all fire zones (to ignore inrush currents). After fifteen seconds, it will monitor all fire zones for two minutes. If any fire zone returns to alarm within the two minute window it will create a fire alarm condition. If a fire zone does not go into alarm within the two minute window it will disregard the initial trip. If another alarm occurs on a fire zone with verification after the two minutes, it will start the process over. After any fire zone is in alarm, all subsequent fire zones are treated as instant (no verification) until the next fire reset. This same procedure will be performed when a [SYSTEM RESET] is entered, except that the two minute instant alarm monitoring period is not observed.

Since alarm and trouble reporting to the central station for fire zones is the same as for burg zones (i.e. it is based on the state of the zone) it is possible for Fire, and Fire Trouble restoral signals to

be transmitted even though the panel may still be displaying these zone conditions. This is because the displays are latched until cleared by an operator action.

NOTE: The use of the controls fire alarm verification feature may not be permitted in some areas. Check your local fire/building codes.

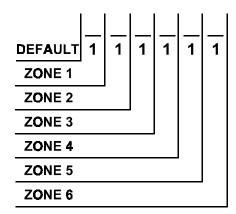
• Fire: This zone is active and will alarm all 24 hours of the day regardless of the arming state of the control. An alarm on a fire zone will be silenced by entering a disarm code whether the control is armed or not. If the fire zone restores and alarms again the alarm will sound again. An open during the armed or disarmed period will send a trouble report and not an alarm. Fire zones are never silent, invisible, or swinger shunted. All fire zones that have alarmed will continue to show on all keypads until a fire reset is performed, even if they have physically restored. Fire zones may not be bypassed using the BYPASS command.

NOTE: If force arming is enabled (see programming address 10), force arming is possible when the fire zone is violated (shorted).

- Interior Delayed: This is a zone programmed to be ignored during the entry delay period. If it is violated when the system is armed, it will activate a delay for the programmed entry delay time. The keypad prealert sounders will activate and the alarm system may be disarmed during this delay period. If the system is not disarmed during this delay period, this zone will activate an alarm.
- Day Monitor: This is a zone programmed to be a
 perimeter instant zone when the system is armed.
 When the system is disarmed, any violation of this
 zone will activate the keypad sounders which will
 sound continuously until a disarm sequence is
 entered. The alarm outputs for this zone will not
 activate and there will be no report sent for this
 zone when the system is disarmed. This zone will
 report a trouble condition if programmed.

6.2 Address 02 - Zone Bypass

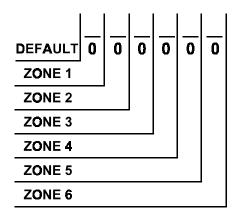
This determines whether the user can bypass the zone. Zones programmed for bypassing can be bypassed even when in alarm. Fire zones will not be bypassable, even if programmed as bypass allowed.



0 = Bypass Not Allowed

1 = Bypass Allowed

6.3 Address 03 - Zone Action



0 = Alarm on Short, Alarm on Open

1 = Alarm on Short, Trouble on Open

2 = Alarm on Open, Trouble on Short

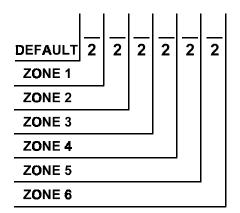
NOTE 1: Fire zones should always be programmed as alarm on short, trouble on open (selection 1).

NOTE 2:If Zone Doubling is used, the Zone Action must be set for Trouble on Short, Alarm on Open. If Zone Doubling is not used, Alarm on Short with Trouble on Open will give a tamper condition on an open or short.

 Alarm on Short: This zone will alarm when the loop is shorted and the system is armed. It will generate a "Not Ready" (or "Fire Trouble" on fire zones) while unarmed and prevent arming unless the problem is cleared, Forced Armed, or Bypassed.

- Alarm on Open: Works like Alarm on Short, but alarms when loop is opened.
- Trouble on Short: This zone will alarm when the loop is shorted and the system is armed. It will generate a "Trouble" while unarmed and prevent arming unless the problem is cleared, Forced Armed, or Bypassed.
- Trouble on Open: Works like Trouble on Short, but alarms when loop is opened.

6.4 Address 04 - Output Type



0 = Invisible (not valid for fire zone)

1 = Silent (not valid for fire zone)

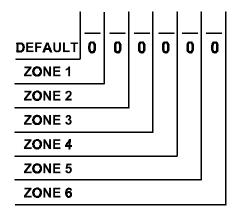
2 = Steady

3 = Pulsing (PO3 only)

- Invisible: This is a zone programmed not to have an alarm output or an alarm display at any keypad when activated. An alarm signal will be sent, but the keypad display will not indicate an alarm while this zone is violated. Invisible alarm zones are recommended for holdup alarms.
- **Silent:** This is a zone programmed to activate the visual display at the keypad, but **not** audible signals. If this zone is also an entry zone, an entry tone will sound when this zone is activated.
- Steady: When this zone alarms all programmed outputs (prog1/prog2/prog3) will come on steady, unless they are already pulsing, in which case they will remain pulsing.
- Pulsing: The pattern for the pulsing audible output will be 0.5 sec on, 0.5 sec off repeated three times, with an additional 1 second delay between repeats. When zones are tripped which could cause both pulsing and steady outputs, the pulsing output will prevail. The alarm outputs will continue to be activated until the bell cutoff timer times out or is reset and then they will silence. Only programmable output 3 and the keypad sounders will pulse, regardless of the programming.

6.5 Address 05 - Zone Response Time

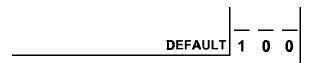
All six zones can be programmed to respond at either 300 ms (± 100 ms) or a programmable time (common to all zones, the time is programmed into Address 06) that can be configured to be between 160 ms and 2.5 seconds.



- 0 = Use the Default ResponseTime (300 ms)
- 1 = Use the Response Time Programmed in Address 06

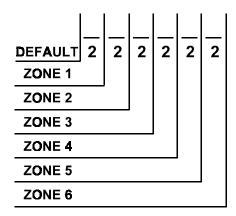
6.6 Address 06 - Programmed Zone Response Time

Sets the time value used in Address 05.



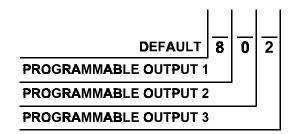
16 to 250, response time = number \times 0.01 seconds (i.e. 100 = 1 second)

6.7 Address 07 - Zone Restoral Options



- 0 = Restore when Sounders Silence
- 1 = Restore with Zone
- 2 = Restore when Disarmed (or Reset)
- Restore when Sounders Silence: If programmed, a zone sends a restoral report and is ready to activate again only after the burglary bell cutoff time expires or the bells are silenced. The zone can alarm multiple times per armed period.
- Restore with Zone: If programmed, a zone sends a restoral report and is ready to activate again as soon as it physically restores. The zone can alarm multiple times per armed period.
- Restore when Disarmed (or Reset): If the zone returns to normal before the bell timer elapses, the alarm display will continue and no restoral will be reported. When the bell timer then elapses, whether or not the zone has restored, the bell will shut down (if selected) but the alarm display will continue and no restoral will be reported. When the system is disarmed (or reset) the bell will silence, the displays will clear and restoral will be reported along with the open/reset event (if programmed). If the zone is a 24 hour zone and has not restored to normal, will not report zone restoral until the zone restores. Unrestored 24 hour zones will show as "not ready" and will prevent the system from arming. In this case, the system will reinitiate the sounders and displays for those zones, but will not send any fire alarm transmission to the central station for those zones, unless a previous restoral has been sent. Fire zones always restore when the system is reset, regardless of this selection.

6.8 Address 08 - Outputs



0 = Intrusion

1 = On During Entry Pre-Alert

2 = System Reset

3 = Armed

4 = Ground Start

5 = Ready to Arm

6 = Follow Burg Alarm

7 = Follow Fire Alarm

8 = Follow Burg and Fire Alarm

9 = Follow Keypad Sounder

A = Duress

B = Trouble

C = Off During Battery Test

D = Partial Armed

E = Follow Burg Alarm 20 Second Delay

- Intrusion: This is an output programmed to latch with any Burg zone alarm, including invisible and silent zones. It will remain latched until the system is disarmed regardless of the restore setting for the zone.
- On During Entry Pre-Alert: This is an output programmed to activate when a perimeter delayed type zone is violated while the system is armed. It will remain activated until the system is disarmed, or until the entry delay time has expired.
- System Reset: This is an output programmed to activate only for 10 seconds after a PIN + [System Reset] is entered at a keypad or if a fire zone with verification activates. Output 1 turns on for 10 seconds, outputs 2 and 3 turn off for 10 seconds. Outputs 2 and 3 are intended to be used to power 4-wire smoke detectors or any other device that requires a power interruption to reset an alarm condition.
- Armed: This is an output programmed to activate when the system is armed. It will remain activated until the system is disarmed.
- **Ground Start:** This is an output programmed to activate for 3 seconds when the phone line is seized. It is intended for use with ground start phone systems that require a momentary short to ground to obtain a dial tone. Connect a separate 12 VDC, DPDT relay. Connect both relay commons to ground, and connect the N/O of each contact to terminal positions 23 and 26 (one to terminal 23, one to 26) of the DS7060. Connect one side of the

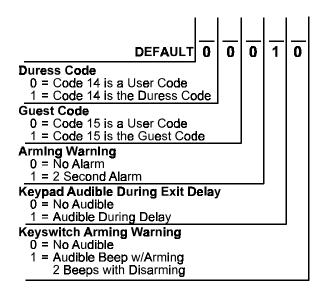
relay coil to the selected Programmable Output and the other side of the coil to 12 volts (Terminal 5) (if PO1 or PO2 is used), or to any Panel Common terminal if PO3 is used. Not intended for UL Listed systems. Not for use with phone line monitors.

- Ready to Arm (System Status): This is an output programmed to follow the "Status" light of the keypad. It will activate when the system is ready to arm with no zones violated.
- Follow Burg Alarm: This is an output programmed to activate when a zone is in an alarm condition. It will remain activated until the system is disarmed or the bell cutoff time expires. This output is intended to activate bells and sirens. This will not activate from Silent or Invisible zones.
- Follow Fire Alarm: This is an output programmed to activate when a zone is in an fire alarm condition. It will remain activated until the system is disarmed (or silenced using PIN + [Off]) or the bell cutoff time expires. This output is intended to activate bells and sirens. This will not activate from Silent or Invisible zones.
- Follow Burg and Fire Alarm: This programs an output to activate when any zone goes into alarm condition.
- Follow Keypad Sounder: This is an output programmed to follow the keypad sounder. It activates during the entry pre-alert. It does not follow momentary keypad beeps such as keystrokes.
- **Duress:** This output activates when the duress code is used to disarm the system.

Note: If the Duress code is used to activate a Programmable Output, entering any valid PIN + [OFF] will deactivate the Programmable Output.

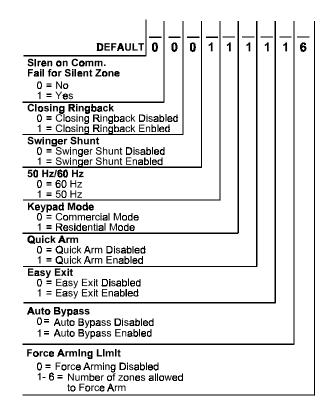
- **Trouble:** This output activates when a trouble condition is present.
- Off During Battery Test: This output turns Off (deactivates) for 2 seconds during a manual or automatic battery test.
- Partial Armed: This output activates whenever the system is armed with one or more zones bypassed. This includes manual bypasses, custom arming and force arming.
- Follow Burg Alarm 20 Second Delay: This output will be delayed for 20 seconds after a zone enters an alarm condition. It will remain activated until the system is disarmed or the bell timeout expires.

6.9 Address 09 - User Control



- Duress Code: If this option is selected and Code 14 is used to disarm the system, a duress report will be sent as the system is otherwise disarmed normally. User Code 14 will not arm the system, or report duress, if the system is not armed.
- Guest Code: If this option is selected, Code 15 is a guest code. It can be enabled by pressing [PIN] [#] [8] [4]. It will remain active until the panel is disarmed with any other valid code.
- Arming Warning: If this option is selected, the alarm output will turn on for 2 seconds when the panel is armed.
- Keypad Audible During Exit Delay: Selection of this option will cause the keypad sounders to beep during the exit delay time. A one second beep will sound at 5 second intervals, changing to a 3-beep tone at 10 and 5 seconds prior to the end of the delay.
- Keyswitch Arming Warning: Selecting this option
 will activate any output programmed as Intrusion,
 Follow Burg Alarm, or Follow Burg Alarm and Fire
 Alarm. The output will beep once (200 ms ON)
 when a keyswitch toggle zone arms the system. A
 double beep will occur (200 ms ON-OFF-ON) when
 a keyswitch toggle zone disarms the system.

6.10 Address 10 - General Control



- Siren on Comm. Fail for Silent Zone: If programmed, a silent zone will sound the alarm outputs if the zone is in an alarm condition and the system fails to communicate with the central station.
- Closing Ringback: If programmed, the keypad sounders and Output 3 will activate for 2 seconds after the system is armed and the closing report is successfully sent. This requires Closing Ringback and Closing Report to be programmed. If the panel does not report to a central station, use "Arming Warning" in Address 9.
- Swinger Shunt: If enabled, a zone can only alarm or trouble up to three times per armed period. After the third alarm or trouble, the zone will be bypassed and a bypass report for this zone will be sent. Fire zones are never swinger shunted.
- 50 Hz/60 Hz: Set to local power type. The panel clock is synchronized to the power line frequency.
 60 Hz required for UL Listed Requirements.
- Keypad Mode: Commercial Mode requires a PIN number for all functions. Residential Mode only requires a PIN number for disarming and silencing alarms.
- Quick Arm: If enabled, a PIN is not needed to arm.

Note: Used only in conjunction with commercial mode.

- Easy Exit: If the system is armed and there have been no zones violated, then you can reenter a Quick Arm Command without first disarming the system. This allows you to change the arming level or to restart the exit delay so you can exit through an entry/exit zone.
- Force Arming Limit: If enabled, the system can be armed when zones are violated or if an AC power failure has occurred, by pressing the [Bypass Key] after an arming command. If bypassing is not allowed, a three beep error tone will sound and the panel will return to standby mode.

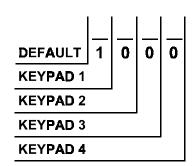
Note: If "Auto Bypass" (Address 10) is enabled, arming the panel will automatically bypass the corresponding number of zones programmed into Force Arming Limit. If "Auto Bypass" is disabled, any zones that were programmed to be bypasses in Address 02, may be Auto Bypassed.

 Auto Bypass: If enabled, the system will automatically bypass faulted zones when an arming command is used. If bypassing is not allowed on the "Not Ready" zone, a three beep error tone will sound, and the panel will return to standby mode.

Note: When enabling Auto Bypass, it may be desirable to program "Force Arming Limit" (Address 10). If "Force Arming Limit" is set to 0, Auto Bypass will allow bypassing of any zone that was programmed to be bypassed by Address 02. If "Force Arming limit" is programmed between 1 and 6, this is the maximum number of zones that can be Auto Bypassed.

6.11 Address 11 - Keypad Assignment

The keypad type (LED or Alpha) or no keypad must be programmed.



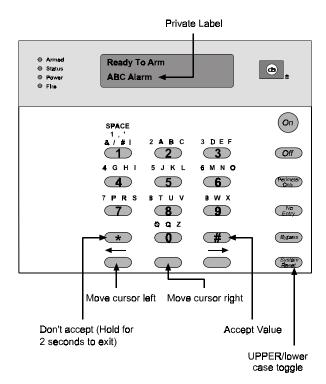
0 = No Keypad or Keypad Disabled

1 = LED Keypad

2 = Alpha Keypad

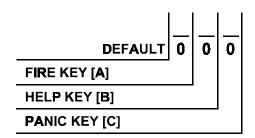
6.12 Address 12 thru 18 - Alpha Label

- Address 12: Private Label The private label will display when the system is Ready to Arm and when it is Armed.
- Address 13: Zone 1 Alpha Label:
- Address 14: Zone 2 Alpha Label:
- Address 15: Zone 3 Alpha Label:
- Address 16: Zone 4 Alpha Label:
- Address 17: Zone 5 Alpha Label:
- Address 18: Zone 6 Alpha Label:



Example: To program "ABC Alarm" as the Private Label				
Enter the Programmer's Mode:	[9] [8] [6] [#] [0]			
Enter the Program Address:	[1] [2] followed by [#]			
Enter:	[2] for the letter "A" then press the right arrow key for the next letter.			
Enter:	[2] twice for the letter "B" then press the right arrow key for the next letter.			
Enter:	[2] three times for the letter "C" then press the right arrow key for the next letter.			
Enter:	[1] until you have a blank space. Note: moving the cursor to the left does not create a space. Spaces must be programmed into the Alpha using the [1] key.			
Enter:	[2] for the letter "A" then press the right arrow key for the next letter. [System Reset] This key is the upper/lower case toggle.			
Enter:	[5] three times for the letter "I" then press the right arrow key for the next letter.			
Enter:	[2] for the letter "A" then press the right arrow key for the next letter			
Enter:	[7] twice for the letter "r" then press the right arrow key for the next letter.			
Enter:	[6] for the letter "m".			
Enter:	[#] Program the next address, program a different address, or exit the Programmer's Mode.			

6.13 Address 19 - Special Keys



0 = Disabled

1 = Invisible

2 = Steady Audible

3 = Pulsing Audible

- Disabled: Special Key not programmed.
- Invisible: Special Key programming for no display of alarm on the keypad or on outputs. Not to be used with the Fire Key.

- Steady Audible: Special Key programming for steady alarms on outputs and keypad sounders. Will turn on steady unless alarms are already pulsing.
- Pulsing Audible: Special Key programming for pulsing alarms on output and keypad sounders.
- Fire Key [A]: The emergency key at the bottom left of the keypad entry area is the Fire Key. If programmed, the key will activate a fire alarm when pressed for 2 seconds. May not be programmed as an invisible alarm.
- Help Key [B]: The help key at the bottom center of the keypad entry area is the Help Key. If programmed, the key will activate a supplementary or an auxiliary type alarm when pressed for 2 seconds.
- Panic Key [C]: The emergency key at the bottom right of the keypad entry area is the Panic Key. If programmed, the key will activate a panic alarm when pressed for 2 seconds; nothing will display at the keypad to indicate an alarm.

DEFAULT

0 | 1

6.14 Address 20 - Report Control

Note: Closing Reports (and subsequent Opening Reports) are only sent when the system is fully armed. [PIN] + [ON] for Commercial Mode. [#] + [ON] for Residential Mode.

OPENING/CLOSING REPORTS

- 0 = Disabled, don't send Opening and Closing Reports
- 1 = Always send Opening & Closing Reports, do not send Bypass Reports for any zone bypassed or force armed.
- 2 = Always send Opening & Closing Reports and send Bypass Reports for each zone bypassed or forced armed (even if swinger shunted for troubles, but not for interior bypass).
- 3 = Only Send Opening & Closing Reports if any zones are bypassed or force armed, and send Bypass Reports for each of these zones (even if swinger shunted for troubles, but not for interior bypass).

DAY MONITOR ZONES

- 0 = Do not send Trouble reports for Day Monitor Zones
- 1 = Send Trouble reports for Day Monitor Zones

OPEN/CLOSE REPORT ROUTING

- 0 = Do Not Report (not allowed for alarm report)
- 1 = Phone 1 Only
- 2 = Phone 2 Only
- 3 = Both Phones 1 and 2
- 4 = Phone 1, Phone 2 as backup

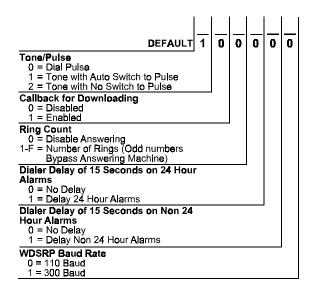
ZONE ALARM, RESTORAL, BYPASS REPORT ROUTING

- 0 = Do Not Report (not allowed for alarm report)
- 1 = Phone 1 Only
- 2 = Phone 2 Only
- 3 = Both Phones 1 and 2
- 4 = Phone 1, Phone 2 as backup

ALL OTHER REPORT ROUTING (SYSTEM ROUTING)

- 0 = Do Not Report (not allowed for alarm report)
- 1 = Phone 1 Only
- 2 = Phone 2 Only
- 3 = Both Phones 1 and 2
- 4 = Phone 1, Phone 2 as backup

6.15 Address 21 - Phone Number Control



- **Dial Pulse:** If programmed, the panel will dial to phone number 1, 2, or 3 using a pulse format.
- **Dial Tone:** If programmed, the panel will dial to phone number 1, 2, or 3 using a tone format.

Note: When dialing through PBX systems, program the phone control as tone dial only.

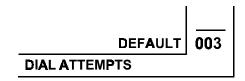
 Tone with Auto Switch to Pulse: If programmed, the control panel will try to dial the first digit in tone dial and check to see if the dial tone has been broken. If it has not been broken, it will try to dial again using pulse dial.

Note: Do not use this setting for PBX systems.

- Tone with No Switch to Pulse (required for PBX): This setting will only use Tone dialing. Must be used if the telephone system requires you to dial a number to get an outside line.
- Callback for Downloading: When enabled, if an attempt is made to connect to the panel for a remote programming session the panel will hang up and callback the number programmed for Phone 3, Address 44 and 45.
- Ring Count: The control panel can be programmed to answer the phone after a selected number of rings for remote programming access.
- WDSRP Baud Rate: This selection determines the baud rate that the panel will use to

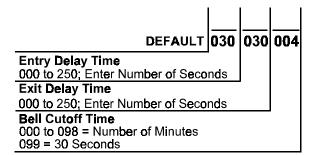
- Answering Machine Bypass: This feature allows
 the control panel to answer incoming calls when
 answering machines are used. If the line rings,
 stops ringing, then rings again within one minute,
 the panel will seize the phone line on the first ring.
 To disable this feature, program the control panel
 to answer on an even number of rings.
- Dialer Delay: A Dialer Delay of 15 seconds can be added when reporting burglar alarms, 24-hour burglar alarms, and fire alarms. This delay will help to prevent false alarm reports by giving the user 15 seconds to disarm the system before a report is sent.

6.16 Address 22 - Dial Attempts



01 to 10 01 to 03 Australia

6.17 Address 23 - Time Delays

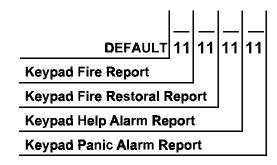


Reports

Program locations 24 through 36 are used differently for the particular Phone Format Chosen (see Address 38, 39). If Zone Doubling is selected in Address 55, Fire and Tamper reports are programmed in Addresses 56 and 57 for Zones 7 and 8.

- If a value of 00 is programmed in any of these locations the panel will not send that particular report.
- Pulsed Formats (3/1, 3/1E, 3/1 with Parity, 3/1E with Parity, 4/1, and 4/2) will need a unique value placed at each address location. Please note that each Central Station receiver differs slightly in the report codes that it expects. Therefore, it is best to verify the codes you use with the Central Station. Some of the reports that can be sent, such as OPEN, CLOSE, PARTIAL CLOSE can send an associated User Number as the second digit. To accomplish this, program an F (*5) as the second digit in the program location. When the report is sent the panel will replace the F with the appropriate user number. Pulsed formats 3/1, 3/1 with Parity, and 4/1 need a 0 for the second digit and cannot send user numbers. A non-zero in the second digit location indicates an extended 3/1E or 4/1E format.
- Fixed Report Formats (Contact ID, SIA, 4/9) have well defined reports that are sent regardless of the value programmed in the report code location. Any non-zero value programmed in the report code location will send the appropriate report.
- Special Formats (Personal Dialing Format, Pager) are not recommended for primary reporting. If they are used, Personal Dialing Format could use the same report codes as the Pulsed Formats. Pager has a limitation in that it can't use the Hex values A (*0), B (*1), C (*2), D (*3), E (*4), F (*5). These values can not be passed on to a Numeric Pager.

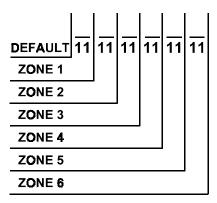
6.18 Address 24 - Keypad Report



Two Digits, 00 through FF

- Keypad Fire Report: This report is sent when a fire alarm has been activated using the "A" emergency key.
- Keypad Fire Restoral Report: This report is sent when a keypad fire alarm has been restored using the [System Reset] command.
- **Keypad Help Alarm Report:** This report is sent when an help alarm has been activated using the "B" emergency key.
- Keypad Panic Report: This report is sent when an emergency alarm has been activated using the "C" emergency key.

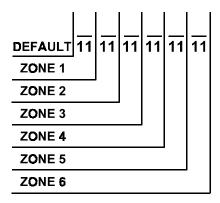
6.19 Address 25 - Zone Alarm Report



Two Digits, 00 through FF

• Zone Alarm: An alarm report is sent when a zone alarm occurs. Program this report for any zones where an alarm report is desired. For local zones (no reports), replace the default value with 00.

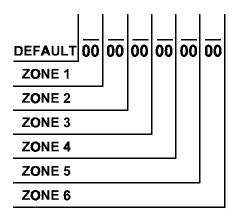
6.20 Address 26 - Zone Alarm Restoral Report



Two Digits, 00 through FF

 Zone Alarm Restoral: This report is sent when the zone alarm is cleared. Refer to Address 07 for exact point at which report will be sent.

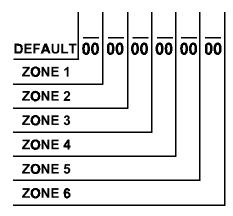
6.21 Address 27 - Zone Trouble Report



Two Digits, 00 through FF

• **Zone Trouble:** This report is sent when a zone trouble condition occurs.

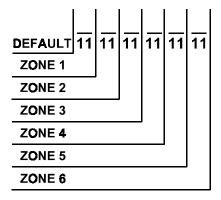
6.22 Address 28 - Zone Trouble Restoral Report



Two Digits, 00 through FF

• Zone Trouble Restoral: This report is sent when the zone trouble condition is cleared.

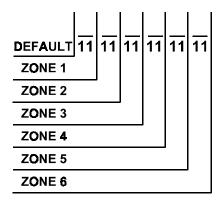
6.23 Address 29 - Zone Bypass Report



Two Digits, 00 through FF

 Zone Bypass Reports are sent with the Closing Report. Address 20 digit 1 (left most digit) must be set for 2 or 3 for these reports

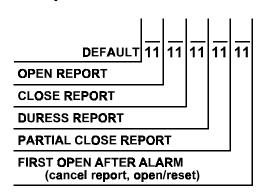
6.24 Address 30 - Zone Bypass Restoral Report



Two Digits, 00 through FF

• Zone Bypass Restoral Reports are only sent with an Opening Report. Address 20 digit 1 (left most digit) must be set for 2 or 3 for these reports.

6.25 Address 31 - Open/Close Duress Report

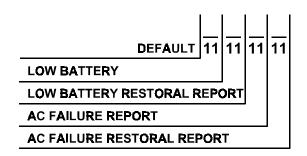


Two Digits, 00 through FF (If second digit is F, the user code is substituted) NOTE: 3/1, 3/1 with Parity, and 4/1 will not send a user number.

NOTE: If "Quick Arm" or Residential Mode is used, User #1 will be reported in closing reports.

- Open: This report is sent when the system has been disarmed. In Contact ID, SIA or 4/9 formats, the user number for the person who disarmed the system will be sent with this report. To send the user number along with an Open Report in other formats, program the extended digit of the report as F ([*] [5]). The Open Report will only be sent if a Close Report was sent previously.
- Close: This report is sent when the system has been armed. In Contact ID, SIA or 4/9 formats, the user number for the person who armed the system will be sent with this report. To send the user number along with a Close Report in other formats, program the extended digit of the report as F ([*] [5]).
- **Duress:** This report is sent when the system is disarmed using a duress code. The user number will not be sent along with this report.
- Partial Close: This report is sent when the system is armed partially, or force armed.
- First Open After Alarm: This report is sent when the system is disarmed after an alarm has occurred. It will also be sent if the system is already disarmed and a user number is entered to silence a 24-hour or fire zone.

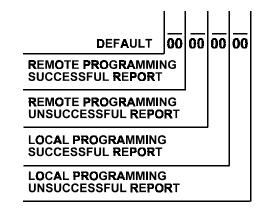
6.26 Address 32 - Battery, AC Report



Two Digits, 00 through FF

- Low Battery Report: This report is sent when a low battery condition occurs.
- Low Battery Restoral Report: This report is sent when a low battery condition restores.
- AC Failure Report: This report is sent after an AC failure condition occurs. AC failure reports will only be sent along with other reports if Address 50 is set to "000." Otherwise reports will be sent after the delay set in Address 50.
- AC Failure Restoral Report: This report is only sent along with other reports if Address 50 is set to "000." Otherwise reports will be sent after the delay set in Address 50.

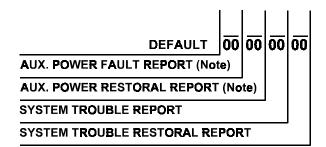
6.27 Address 33 - Programming Report



Two Digits, 00 through FF (uses system report routing)

- Remote Programming Successful: This report is sent after a Remote Programming session, if the session was terminated properly.
- Remote Programming Unsuccessful: This report is sent after a Remote Programming session, if an error occurs or session doesn't terminate properly.
- Local Programming Successful: This report is sent when local programmer's mode is exited and no error is associated with the programming.

6.28 Address 34 - System Report



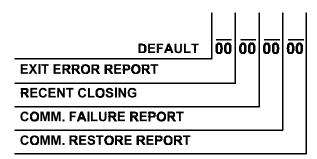
Two Digits, 00 through FF (uses system report routing)

Note: Ti

The Auxillary Power Fault Report is only available on DS7060 panels with auxillary power fuses. Panels without fuses will send a System Trouble Report if problems occur with the auxillary power.

- System Trouble: This report is sent when a control trouble condition occurs.
- System Trouble Restoral: This report is sent when all system trouble conditions restore.

6.29 Address 35 - Exit Error, Recent Closing, Comm. Failure Report

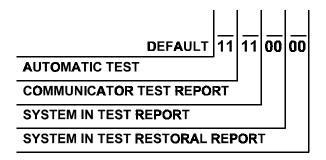


Two digits, 00 through FF, (if second digit is F, the user code is substituted except if 3/1, 3/1 with Parity, or 4/1 format is used).

- Exit Error: This report is sent if an exit error occurs. An exit error occurs when an entry/exit zone is still violated at the end of the exit delay. If this happens, the entry delay will begin. If the system is not disarmed before the entry delay expires, an alarm report for the effected zone will be sent and the Exit Error Report will be sent.
- Recent Closing: This report is sent, along with any alarm reports, when there is an alarm within the first five minutes after the system has been armed.

- Comm. Failure Report: This report is sent after the programmed number of communicator attempts. Refer to Address 22 - Dial Attempts.
- Comm. Restore Report: This report is sent after there has been a communicator failure. Retries will occur after 30 minutes, then every 24 hours or when a new event occurs. When the next successful communicator attempt occurs, this report will be included.

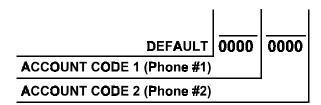
6.30 Address 36 - Test Reports, System Test



Two Digits, 00 through FF

- Automatic Test Report: This report is sent at fixed intervals determined by programming Address 48 Automatic Test Report Interval. By default, the panel will send the first automatic report 12 hours after the panel has been powered up, and from that point on, it will follow the interval selected by Address 48. The time before the first Automatic test report is sent can be adjusted between 1 and 24 hours after the panel has been powered up by setting Address 49 Hours to First Auto Test Report.
- Communicator Test Report: This report is sent as a result of initiating a Communicator Test, a PIN + [#] [8] [2] command sequence. Requires that Addresses 37 "Account Code", 38 "Phone # 1 Format" and 40 "Phone #1 be programmed.
- System Test: This report is sent when a system test has been started using the [#] [8] [1] key sequence.
- System Test Restoral: This report is sent when the system test [#] [8] [1] has been completed or has timed-out.

6.31 Address 37 - Account Codes



4 Digits, 0000 through FFFF

NOTE: If the account code is "0000" no reports will

be sent.

NOTE: If a 3-digit code is required (when using

pulse formats 3/1 and 3/1 with Parity) the fourth digit must be 0. For example: If the account code is 121, program 1210 in the

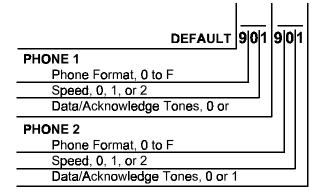
account code address.

NOTE: If using personal dialing or Pager format an

account code is still required, even if the system does not report to a central station. The account code must use digits 0-9. A-F

cannot be displayed on a pager.

6.32 Address 38 - Phone #1 Format Address 39 - Phone #2 Format



PHONE FORMAT

0 = Disabled

1 = 3/1

2 = 3/1E (Extended Reporting)

3 = 3/1 with Parity

4 = 3/1E with Parity

5 = 4/1

6 = 4/2

8 = SIA (110 Baud)

9 = Contact ID

A = SIA (300 Baud)

C = Personal Dialing

D = 4/9

F = Pager

SPEED

0 = 10 pps

1 = 20 pps

2 = 40 pps

DATA/ACKNOWLEDGE TONES

0 = 1900 data - 1400 ack

1 = 1800 data - 2300 ack

6.33 Address 40-41 - Phone #1

(Reporting)

Address 42-43 - Phone #2

(Reporting)

Address 44-45 - Phone #3

(Remote Programming)

Address 40 Phone #1 (digits 1-16)

Address 41 Phone #1 (digits 17-32)

Address 42 Phone #2 (digits 1-16)

Address 43 Phone #2 (digits 17-32)

Address 44 Phone #3 (digits 1-16)

Address 45 Phone #3 (digits 17-32)

Note

To dial the [*] character, enter *1 (the [*] character is sent as "1" "1" when pulse dialing). The letter "B" will be displayed.

To dial the [#] character, enter *2 (the [#] character is only valid when tone dialing). The letter "C" will be displayed.

To input a three second delay, enter *3. The letter "D" will be displayed.

To wait for the dial tone, enter *4 in the first digit. The letter

"E" will be displayed.

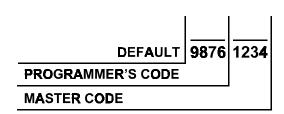
To disable a phone number, enter *5 in the first digit. The

underscore "_" will de displayed.

To delete the phone number from the display window, enter the $^{\star}5$ in all digits.

6.34 Address 46 - Programmer & Master Codes

See the Users Guide for more information on Personal Identification Numbers.



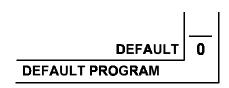
Four Digits each code: 0000 through 9999

 User Codes 2 through 15 are programmed from Master Code Programming Mode

Note: The display will only show ******** and give no visual indication of the codes being entered. You can not read back

the codes.

6.35 Address 47 - Default EEPROM



0 = No Action

1 = Load Factory Default

CAUTION: Entering a [1] in Address 47 will erase

all prior programming.

6.36 Address 48 - Automatic Test Report Interval



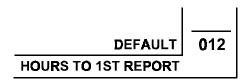
0 = None

1 = Callout Daily

2 = Callout every 7 days

3 = Callout every 28 days

6.37 Address 49 - Hours to First Auto Test Report



001-023 hours

 Set this value to the number of hours from the time the panel was powered up for the first report.
 Example: If the panel was powered up at 2 PM and you want test reports at 3 AM, set to [0 1 3] (2 PM + 13 hours = 3 AM). If not set, the first report will be sent 12 hours after panel power up.

6.38 Address 50 - AC Failure Report Delay



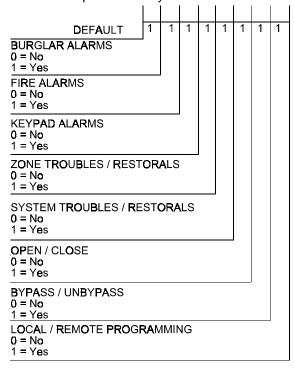
000 to 250; Enter Number of Minutes

· Address 32 must be programmed to this report.

Note: If AC power should restore before the "AC Failure Report" time, no AC Failure Report will be sent.

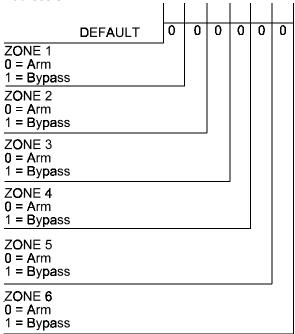
6.39 Address 53 - History Controls

History Controls determine what events are stored in the panels history buffer.



6.40 Address 54 - Custom Arming

Custom Arming programming allows the [#] + [4] key sequence on the keypad to be used for custom arming. The programming determines which zones will be bypassed (not armed) during custom arming. Note: Custom Arming will send a Partial Closed report if programmed to do so in Address 31.



6.41 Address 55 - Zone Doubling

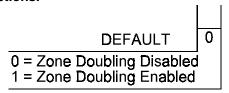
Zone Doubling adds three additional specific zones to the control panel:

Zone 7 - Fire: Supervised for use with 4-wire smoke detectors.

Zone 8 - Tamper: Supervised for use with tamper switches.

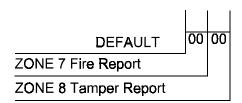
Zone 9 - Keyswitch: Supervised keyswitch input. A momentary contact closure on this input will toggle the panel between the armed and disarmed states.

NOTE: The zone input wiring and End-Of-Line resistors differ if Zone Doubling is selected. Be sure to review Section 4.0, Terminal Wiring, for the correct resistor selections.



6.42 Address 56 - Expanded Zone Reports

Expanded Zone Reports are used only if Zone Doubling (see Address 55) is selected.



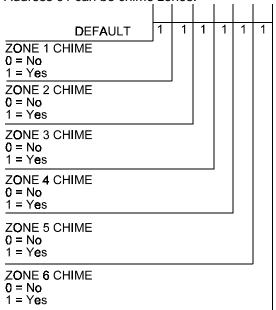
6.43 Address 57 - Expanded Zone Restorals

Expanded Zone Restorals are used only if Zone Doubling (see Address 55) is selected.



6.44 Address 58 - Custom Chime

Custom Chime determines which zones will chime in the chime mode. Only Zones programmed as Perimeter Instant, Perimeter Delayed, Perimeter Homeguard or Perimeter Homeguard Follower in Address 01 can be chime zones.



	PIN NUMBER	NAME
Example	1038	Thomas J. Brown
User 01		
User 02		
User 03		
User 04		
User 05		
User 06		
User 07		
User 08		
User 09		
User 10		
User 11		
User 12		
User 13		
User 14		
User 15		

	DEVICE	LOCATION	TYPE
Example	PIR	Kitchen	Invisible alarm, alarm on short, alarm on open, 24-hour
Zone 1			

